FORT McPHERSON, NT.

CARIBOU HARVEST STUDY

ANNUAL REPORT FOR

SEPT. 1992 - MARCH 1993

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and

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GOVERNMENT OF THE NORTHWEST TERRITORIES

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ABSTRACT

This report summarizes the 1992-93 Porcupine caribou harvest taken by general hunting licence (GHL) holders in Fort McPherson, NT. The number, sex, age and kill locations of caribou were determined by interviewing 90 hunters on a monthly basis. The reported harvest during the period September 1992 through March 1993 was 333 caribou. Bulls made up 63% of the harvest, cows 28%, calves 7%, and 2% were unknown. The greatest proportion of the harvest occurred during October (58%) which coincides with the fall migration. Ninety percent of the caribou harvested were taken in the Yukon, primarily in the Rock River area.

TABLE OF CONTENTS

ABSTRACT iii

LIST OF TABLES vii

INTRODUCTION 1

METHODS 2

RESULTS AND DISCUSSION 3

CONCLUSIONS 4

RECOMMENDATIONS 5

ACKNOWLEDGEMENTS 6

LITERATURE CITED 7

LIST OF TABLES

Table 1. Number of hunters interviewed during the Porcupine caribou harvest study conducted in Fort McPherson, 1986 to 1992-93. 8

Table 2. Number of bull, cow and calf Porcupine caribou harvested during September 1992 to March 1993 by the community of Fort McPherson 9

Table 3. Number of bull, cow and calf Porcupine caribou harvested by the community of Fort McPherson during August to March 1985-86 to 1992-93 10

Table 4. Proportion of bull, cow and calf Porcupine caribou in the annual harvest taken by the community of Fort McPherson, 1985-86 to 1992-93 11

Table 5. Number of Porcupine caribou harvested by area and month during the period September to March 1992-93 12

INTRODUCTION

The Department of Renewable Resources, Government of the Northwest Territories (DRR-GNWT) has conducted hunter surveys in Fort McPherson since 1985 to determine the number, age, sex and kill location by month of Porcupine caribou (*Rangifer tarandus granti)* harvested (Fraser and McLean 1990, 1991, Fraser et al. 1993). That information is forwarded to the Porcupine Caribou Management Board (PCMB) who ensures that the herd is not being overharvested, documents the importance of caribou to northern communities and identifies important hunting areas. This report summarizes the harvest data obtained during 1992-93.

METHODS

A member of the Fort McPherson Renewable Resource Council was contracted to conduct the field component of the study. During the initial phase of the study, the field worker prepared a master list of hunters in the community that held General Hunting Licences (GHL) (Fraser and McLean 1990, 1991). The field worker and the project biologist (DRR-GNWT, Inuvik Region) each kept a copy of the master list. During the first two weeks of each month, hunters on the master list were asked to recall the number, sex, age class and kill sites of caribou they harvested during the previous month (Appendix A). The field worker submitted the data sheets to the DRR-GNWT, Inuvik Region at mid-month. The project biologist then tabulated and analyzed the data. Harvest data were collected for the period September 1992 to March 1993.

RESULTS AND DISCUSSION

The 90 hunters that participated in the study harvested 333 Porcupine caribou during the survey period; this was the lowest harvest reported since 1985 (Table 1, 2, 3 and 4). The greatest proportion of caribou were harvested during October (58%) which coincides with the fall migration (Table 2). Few caribou were harvested during November, December, January, February and March, probably because the majority of the Porcupine caribou herd wintered near Old Crow and hunters did not have easy access to the herd.

Bulls accounted for 63% of the 1992-93 harvest compared with 12.8 to 30.4% of the harvest during 1985-86 to 1991-92 (Table 4). Cows comprised 28% of the 1992-93 harvest compared with 59.9 to 82.1% of the harvest during 1985-86 to 1991-92 (Table 4). Ninety percent of the caribou harvested were taken in the Yukon Territories (YT), primarily in the Rock River area (Table 5).

The harvest reported here should be considered as a minimum as only GHL holders were interviewed. The reported harvest may have been influenced by other sources of bias (Jingfors 1986, Usher and Wenzel 1987, Fraser and McLean 1990, 1991).

CONCLUSIONS

1. The number of hunters interviewed decreased slightly from 1991-92.
2. The 1992-93 harvest was the lowest reported since 1985, probably because the majority of the Porcupine caribou herd wintered west of Old Crow, YT.
3. The greatest proportion of Porcupine caribou harvested by the community were taken in October in the Rock River area, YT. This coincides with the fall migration.
4. Bulls comprised the largest segment of the reported harvest. In previous years most of the harvest was comprised of females.

RECOMMENDATIONS

1. Continue to monitor the number of Porcupine caribou harvested by the residents of Fort McPherson through recall surveys.
2. Conduct hunter surveys to document harvest that occurs in April.
3. Begin identifying hunters by their GHL numbers rather than by name on the monthly harvest summaries to maintain confidentiality and avoid confusion of hunters with the same names.

ACKNOWLEDGEMENTS

We would like to thank the hunters in Fort McPherson who provided harvest information. Neil Colin conducted the monthly interviews. Norman Warville, RRO III and John A. Snowshoe, RRO II, DRR-GNWT provided logistical support.

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Table 1. Number of hunters interviewed during the Porcupine caribou harvest study conducted in Fort McPherson, 1986 to 1992-93.

Interview Period					Number of Hunters Interviewed	Number of Caribou Harvested
January	1986	to	March	1986	62	587
August	1987	to	March	1988	48	889
October	1988	to	March	1989	42	1270
October	1989	to	March	1990	27	614
August	1990	to	March	1991	30	708
September	1991	to	March	1992	101	1668
September	1992	to	March	1993	90	333

Table 2. Number of bull, cow and calf Porcupine caribou harvested during September 1992 to March 1993 by the community of Fort McPherson.

Sex/Age	Number of Caribou Harvested by Month							Total	Percent of Total
	Sept	Oct	Nov	Dec	Jan	Feb	Mar		
Bulls	23	134	4	24	4	11	9	209	62.8
Cows	9	50	4	8	1	6	14	92	27.6
Calves	2	8	2	4	2	3	4	25	7.5
Unknown	7	0	0	0	0	0	0	7	2.1
Total	41	192	10	36	7	20	27	333	
Percent of Total	12.3	57.7	3.0	10.8	2.1	6.0	8.1		100.0

Table 3. Number of bull, cow and calf Porcupine caribou harvested by the community of Fort McPherson during August to March 1985-86 to 1992-93.

Year	Sex/ Age	Number of Caribou Harvested by Month[a]								
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
1985-86	Bulls	NR	NR	NR	NR	NR	24	84	55	163
	Cows	NR	NR	NR	NR	NR	42	149	170	361
	Calves	NR	NR	NR	NR	NR	2	19	42	63
	Total	NR	NR	NR	NR	NR	68	252	267	587
1987-88	Bulls	8	19	35	53	54	38	30	33	270
	Cows	13	17	89	141	67	71	39	111	548
	Calves	0	0	7	13	9	8	7	27	71
	Total	21	36	131	207	130	117	76	171	889
1988-89	Bulls	NR	NR	39	5	77	12	60	61	254
	Cows	NR	NR	261	96	137	21	83	163	761
	Calves	NR	NR	110	20	50	2	24	49	255
	Total	NR	NR	410	121	264	35	167	273	1270
1989-90	Bulls	NR	NR	17	11	28	3	4	33	96
	Cows	NR	NR	14	179	110	31	16	132	482
	Calves	NR	NR	4	0	4	1	1	26	36
	Total	NR	NR	35	190	142	35	21	191	614
1990-91	Bulls	36	6	28	6	8	17	34	39	174
	Cows	38	5	93	59	34	29	97	87	442
	Calves	4	0	27	3	4	10	22	22	92
	Total	78	11	148	68	46	56	153	148	708
1991-92	Bulls	NR	36	61	11	13	36	16	40	213
	Cows	NR	30	371	107	168	190	217	287	1370
	Calves	NR	7	29	3	10	14	9	13	85
	Total	NR	73	461	121	191	240	242	340	1668
1992-93	Bulls	NR	23	134	4	24	4	11	9	209
	Cows	NR	9	50	4	8	1	6	14	92
	Calves	NR	2	8	2	4	2	3	4	25
	Unknown	NR	7	0	0	0	0	0	0	7
	Total	NR	41	192	10	36	7	20	27	333

[a] NR = not recorded.

Table 4. Proportion of bull, cow and calf Porcupine caribou in the annual harvest taken by the community of Fort McPherson, 1985-86 to 1992-93.

	Year of Harvest						
Sex/Age	1985-86	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Bulls	27.8	30.4	20.0	15.6	24.6	12.8	62.8
Cows	61.5	61.6	59.9	78.5	62.4	82.1	27.6
Calves	10.7	8.0	20.1	5.9	13.0	5.1	7.5
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5. Number of Porcupine caribou harvested by area and month during the period September to March 1992-93.

Harvest Area	1992				1993			Total	Percent of Total Harvest
	Sept	Oct	Nov	Dec	Jan	Feb	Mar		
Above Eagle Plains Hotel	0	0	0	0	0	2	0	2	0.6
Arctic Circle Area	0	0	0	20	0	0	0	20	6.0
Bear Creek Area	0	0	5	0	0	0	0	5	1.5
Caribou Creek Area	0	0	0	9	0	0	0	9	2.7
Eagle River Area	0	0	5	0	4	0	0	9	2.7
Head of Stony Creek	0	0	0	0	3	0	0	3	0.9
James Creek Area	1	18	0	0	0	7	4	30	9.0
Ogilvie River/Mountain Area	0	0	0	0	0	0	12	12	3.6
Rock River Area	19	151	0	0	0	0	0	170	51.1
Yukon Border Area	21	23	0	7	0	11	11	73	21.9
Total	41	192	10	36	7	20	27	333	
Percent of Total Harvest	12.3	57.7	3.0	10.8	2.1	6.0	8.1		100.0